Amendments to the Claims

Please cancel claims 2, 4 and 5, and amend claims 1, 3, 6-8, 12 and 13 as shown in the following listing of claims. This listing of claims will replace all prior versions, and listings, of claims in the application.

1   1.   (currently amended) Demodulator arranged to demodulate a first signal

2   with the aid of a second signal, the demodulator comprising:

3   a first bandpass filter arranged to recover the first signal from a

4   received signal; ~~and~~

5   a second bandpass filter arranged to recover the second signal from

6   a received signal, the passband of the second bandpass filter being substantially

7   narrower than the passband of the first bandpass filter; and

8   ~~in which the passband of the second bandpass filter is substantially~~

9   ~~narrower than the passband of the first bandpass filter~~

10   compensation means for compensating phase error between the

11   recovered first and second signals, the compensation means comprising a phase

12   shifter that is arranged to shift a phase of the recovered first signal, the phase shift

13   being dependent upon the phase difference between the recovered second signal

14   and a reference signal, the compensation means further comprising a selector that

15   is arranged to select the reference signal from at least two sources.

1   2.   (canceled).

1   3.   (currently amended) Demodulator according to claim 1 [[2]], wherein the

2   compensation means comprises a delay element that is arranged to delay the

3   recovered first signal.

1   4.   (canceled).

1   5.   (canceled).

1   6.   (currently amended) Demodulator according to claim 1 [[5]], wherein the
2   selector is a programmable selector.

1   7.   (currently amended) Demodulator according to claim 1 [[5]], wherein one
2   of the at least two sources is a demodulated first signal.

1   8.   (currently amended) Demodulator according to claim 1 [[5]], wherein one
2   of the at least two source is an image of a demodulated first signal which is stored
3   in memory means.

1   9.   (previously presented) Demodulator according to claim 8 wherein, the
2   memory means comprises an analogue to digital converter arranged to provide a
3   digital image of the demodulated first signal.

1   10.   (previously presented) Demodulator according to claim 1 wherein the
2   demodulator further comprises a phase locked loop for stabilizing the recovered
3   second signal.

1   11.   (previously presented) Demodulator according to claim 1 wherein the
2   recovered second signal is used for frequency down converting at least a third
3   signal.

1   12.   (currently amended) Apparatus comprising a demodulator, the
2   demodulator being arranged to demodulate a first signal with the aid of a second
3   signal, the demodulator comprising:
4   a first bandpass filter arranged to recover the first signal from a
5   received signal; ~~and~~
6   a second bandpass filter arranged to recover the second signal from
7   the received signal, the passband of the second bandpass filter being substantially
8   narrower than the passband of the first bandpass filter; and
9   ~~in which the passband of the second bandpass filter is substantially~~
10 ~~narrower than the passband of the first bandpass filter~~

11   compensation means for compensating phase error between the

12 recovered first and second signals, the compensation means comprising a phase

13 shifter that is arranged to shift a phase of the recovered first signal, the phase shift

14 being dependent upon the phase difference between the recovered second signal

15 and a reference signal, the compensation means further comprising a selector that

16 is arranged to select the reference signal from at least two sources.

1   13.   (currently amended) Method for demodulating a first signal with the aid of

2 a second signal the method comprising the steps of:

3   using a first bandpass filter for recovering the first signal from a

4 received signal;

5   using a second bandpass filter having a substantially narrower

6 passband than the first bandpass filter, for recovering the second signal from the

7 received signal; and

8   compensating phase error between the recovered first and second

9 signals, the compensating including shifting a phase of the recovered first signal,

10 the shifting being dependent upon the phase difference between the recovered

11 second signal and a reference signal, the compensating further including selecting

12 the reference signal from at least two sources.

1   14.   (previously presented) Demodulator according to claim 1 further

2 comprising a mixer connected to the first and second bandpass filters to mix the

3 first signal and the second signal.